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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
POON, KING Y	
ART UNIT	PAPER NUMBER
2624	

DATE MAILED: 03/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/650,999	OIDA, JUN	
	Examiner	Art Unit	
	King Y. Poon	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 December 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *38-40,42-52,55,56 and 58* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 August 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/13/2005 has been entered.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 58 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 58 is drawn to functional descriptive material embodied on a computer readable medium (i.e., "data structures and computer programs which impart functionality when employed as a computer component" at MPEP 2106.IV.B(1)). However, the program/algorithm itself merely manipulates data or an abstract idea, or merely solves a mathematical problem without a limitation to a practical application in the technological arts. MPEP 2106.IV.B.2(a) (Statutory Product Claims) states:

"A claim limited to a ... manufacture, which has a practical application in the technological arts, is statutory."

In order for a claimed invention to accomplish a practical application, it must produce a "useful, concrete and tangible result" *State Street,* 149 F.3d at 1373, 47 USPQ2d at 1601-02 (see MPEP 2106.II.A). Currently, the claim does not recite a practical application. In order to for the claimed product to produce a "useful, concrete and tangible" result, recitation of one or more of the following elements is suggested:

> An example that would overcome the 101 rejection is claiming "A computer readable medium storing a computer executable control program..."

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 38-40, 51, 52, 55, 56, 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parulski (US 2001/0013894) in view of Rissman (6,552,743).

Regarding claim 38: Parulski teaches an image processing system (the system of the camera a printer system 0015 and 0016) in which an image input apparatus (camera) and an image output apparatus (printer) are connected via a serial bus (0044), wherein the image input apparatus comprises: input means for inputting image data of a first format (the hardware and software used to input printer related processing

data to the image processor 18 and memories used before such processing 0045); determination means (the software/hardware used to determine whether printer or camera is used for processing the image data, 0025) determining whether to convert the image data of the first format (before being processed) into image data of a second format (after processed); first conversion means (the software and hardware used to perform the processing disclosed in 0023, 0026) for converting the image data of the first format into the image data of the second format based on a determination result, and first communication means (24, 0044) for transmitting the image data of the first format or the image data of the second format to the image output apparatus, and wherein the image output apparatus comprises: second communication means (32, fig. 2) for receiving image data transmitted from the image input apparatus; holding means (memory of 0024) for temporarily holding the received image data in a buffer having a predetermined capacity (inherent properties of memory); second conversion means (the hardware and software for carrying out the compensation for the variable, 0025), converting the image data into image data of the second format (processed/compensated); and output means (the hardware and software that outputs the print data to the marking means of 0024; note: it is well-known in the art that a processor output image data to a print engine sequentially because most printer prints portions of data at a time, official notice) for sequentially outputting the image data of the second format, wherein a conversion of image data performed by each of the first conversion means and the second conversion means includes a color correction process (color space transformation, 0023) a decompression process (0023) and a

conversion process (re-sizing, 0023) and wherein the second conversion means converts image data in accordance with the conversion process performed by the first conversion means (both are using the parameters provided by the printer, 0025).

Paragraph 0025 Parulski teaches processing first format into second format by the printer.

Although inherent, Parulski does not specifically states that the printer converts the image data into the second format, if the image data is received in the first format.

Rissman, in the same field of image processing between a digital camera and a printer, states "image data is converted by the processor 50 to a predetermined image file format if the image data was stored in a different format."

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to allowed the printer of Parulski to converts the image data into the second format, if the image data is received in the first format such that Parulski's invention (in the case the printer needs to compensate the variable parameters of 0025) would be functioning properly.

In accordance with claim 55, the method steps of claim 55 are all performed by the means of the apparatus of claim 38. The input, determination, first conversion, first communication, second communication, holding, second conversion and output means of claim 38, respectively, perform the input, determination, first conversion, transmission, reception, holding, second conversion and output steps of claim 55.

In accordance with claim 58, Parulski discloses using a program to stored in memory to operate the apparatus (0026). The code of input, determination, first

conversion, transmission, reception, holding, second conversion and output steps of claim 58 are performed in the input, determination, first conversion, transmission, reception, holding, second conversion and output steps of claim 55, respectively.

In accordance with claims 39 and 56, Parulski discloses that the first format is a compressed (paragraph 22) data format and the second is obtained by decompressing the first (paragraph 26).

In accordance with claim 40, Parulski discloses that the first format is JPEG (paragraph 33).

In accordance with claims 51 and 52, Parulski discloses that the serial bus is compatible with the USB or IEEE1394 standards (paragraph 44).

5. Claims 42-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parulski (US 2001/0013894) in view of Rissman (6,552,743) as applied to claim 38 above, and further in view of Nagasaka (US 5,333,246).

Regarding claim 42: 0025, Parulski teaches query printer whether to have the printer process the image data or to have the camera processing the image data.

Parulski does not teach the determining means determines to convert the image data of the first format when the buffer is full.

Nagasaka, in the same area to have either processing means A or processing means B to perform data processing, teaches determining means (program of fig. 6) makes a determination to process data when buffer are full (17, fig. 6, return error code, fig. 7).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Parilski to include: determining means determines to convert the image data of the first format when the buffer is full, such that Camera 10 would be able to process the image data when the printer is unable to process the data due to buffer full, and would have prevented image data of not being processed at all in the case of buffer full.

In accordance with claim 43, the combination of Parulski and Rissman makes obvious that the conversion of the file format would also be made based on the state of the serial bus; if the serial bus is busy, then data cannot be transmitted, thus the data cannot be transferred to the output apparatus for processing, which then must be performed by the input apparatus (or as disclosed by Parulski, 0024-0025), if the bus is available, data can be transferred, thus the output apparatus is available to perform the image processing (or as disclosed by Rissman).

Regarding claim 44: Nagasaka teaches the second communication means notifies the image input apparatus of buffer information representing an empty state of the buffer (return normal end code, fig. 7).

Regarding claims 45, 46: As discussed in claim 42, the reply to the camera from the printer that the printer cannot process the image data is an indication that the memory is full and the reply to the camera is an message (request) to the camera to have the camera processes the image data.

Regarding claims 47-49: Parulski does not teach wherein the determination means makes a determination in units of predetermined blocks as to whether to convert

the image data of the first format and each of the first conversion means and the second conversion means converts the image data of the first format into the image data of the second format for all blocks after a block that the determination means makes a determination to convert.

Such limitation is taught by Nagasaka, fig. 6, fig. 7, column 6, lines 65-68, column 7, lines 15.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was to have modified Parulski to include: wherein the determination means makes a determination in units of predetermined blocks as to whether to convert the image data of the first format and each of the first conversion means and the second conversion means converts the image data of the first format into the image data of the second format for all blocks after a block that the determination means makes a determination to convert; to create a high-speed, high density processing, which can reduce the contents to be processed by a single processor (Nagasaka, column 2, lines 15-25).

Regarding claim 50: Nagasaka (after combined with Parulski) teaches decision means for comparing performance of the first conversion means (column 8, lines 35-40, Nagasaka, the determination is for each block, and heavy load means bad performance of a processor for processing the data block) with the performance of the second conversion means for a first block image data of the first format, and for deciding to perform conversion processing by a conversion means exhibiting higher performance (fig. 6, Nagasaka).

Response to Arguments

6. Applicant's arguments filed 12/13/2005 have been fully considered but they are not persuasive.

With respect to applicant's argument that Parulski does not teach "wherein a conversion of image data performed by each of the first conversion means and the second conversion means includes a color correction process, a decompression process, and a conversion process, and wherein the second conversion means converts image data in accordance with the conversion process performed by the first conversion means" has been considered.

In reply: Parulski teaches first conversion means (the software and hardware used to perform the processing disclosed in 0023, 0026) for converting the image data of the first format into the image data of the second format based on a determination result, and first communication means (24, 0044) for transmitting the image data of the first format or the image data of the second format to the image output apparatus, and wherein the image output apparatus comprises: second communication means (32, fig. 2) for receiving image data transmitted from the image input apparatus; holding means (memory of 0024) for temporarily holding the received image data in a buffer having a predetermined capacity (inherent properties of memory); second conversion means (the hardware and software for carrying out the compensation for the variable, 0025), converting the image data into image data of the second format

(processed/compensated); wherein a conversion of image data performed by each of the first conversion means and the second conversion means includes a color correction process (color space transformation, 0023) a decompression process (0023) and a conversion process (re-sizing, 0023) and wherein the second conversion means converts image data in accordance with the conversion process performed by the first conversion means (both are using the parameters provided by the printer, 0025).

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is 571-272-7440. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on 571-272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

February 28, 2006

KING Y. POON
PRIMARY EXAMINER